

ABSTRACT OF THE DISCLOSURE**DIFFERENT CACHING TREATMENT OF MEMORY CONTENTS
BASED ON MEMORY REGION**

Caching memory contents differently based on the region to which the memory has been partitioned or allocated is disclosed. A first region of a first line of memory to be cached is determined. The memory has a number of regions, including the first region, over which the lines of memory, including the first line, are partitioned. Each region has a first variable having a corresponding second variable. If the first variable for any region is greater than its corresponding second variable, one such region is selected as a second region. A line from the lines of the memory currently stored in the cache and partitioned to the second region is selected as the second line. The second line is replaced with the first line in the cache, the first variable for the second region is decremented, and the first variable for the first region is incremented.